Amendments to the Claims

- 1-47. (Canceled)
- 48. (Currently Amended) A composition comprising:
 - (a) a biocompatible substrate <u>having a length in a range of about 10 cm to about</u> 30 cm;
 - (b) a genetically altered chondrocyte <u>cultured and</u> modified to express a therapeutic agent in a target region associated with a disorder, the genetically altered <u>chondrocyte</u> not used for tissue repair or construction,

wherein the target region is an ectopic site and wherein the composition is capable of delivering the therapeutic agent at a level sufficient to ameliorate the disorder and the genetically altered chondrocyte does not perform the function of cartilage tissue and is not used for tissue repair or construction.

- 49. (Previously Presented) The composition of claim 48, wherein the composition does not become part of the ectopic target region.
- 50. (Previously Presented) The composition of claim 48, further being adapted to deliver the therapeutic agent to an environment surrounding a cell associated with a disorder, and being capable of modifying the environment surrounding the cell.
- 51. (Previously Presented) The composition of claim 48, wherein the chondrocyte produces a therapeutic agent selected from the group consisting of a protein, an antibody, a mimetibody, an antigen, a hormone, an anti-inflammatory agent, an antiviral agent, an anti-bacterial agent, a growth factor, a cytokine, an oncogene, a tumor suppressor, a transmembrane receptor, an adhesion molecule, a neurotransmitter, a morphogenetic protein, a differentiation factor, an enzyme, and an extracellular matrix protein.
- 52. (Previously Presented) The composition of claim 48, wherein the therapeutic agent is an Erythropoietin protein.
- 53. (Previously Presented) The composition of claim 48, wherein the therapeutic agent is an Erythropoietin mimetibody.

- 54. (Previously Presented) The composition of claim 48, wherein the ectopic site is in a site in an organ selected from the group consisting of the brain, heart, liver, kidney, gastro-intestinal tract, spleen, smooth muscles, skeletal muscles, eye, ganglions, lungs, gonads, and pancreas.
- 55. (Previously Presented) The composition of claim 48, wherein the ectopic site is an aqueous environment selected from the group consisting of blood and plasma.
- 56. (Previously Presented) The composition of claim 48, wherein the biocompatible substrate is gel matrix substrate.
- 57. (Previously Presented) The composition of claim 56, wherein the gel matrix substrate is selected from the group consisting of alginate, polysaccharide, and agarose.
- 58. (Previously Presented) The composition of claim 56, wherein the dimensions of the implanted gel matrix substrate determines the concentration of chondrocytes within the gel matrix substrate that are available to express the therapeutic agent.
- 59. (Previously Presented) The composition of claim 56, wherein the concentration of chondrocytes in the gel matrix substrate is about 100,00 to 10 million cells per ml in a gel matrix volume of 0.05 ml to 10 ml.
- 60. (New) A composition comprising:
 - (a) a biocompatible substrate; and
 - (b) a genetically altered chondrocyte cultured and modified to express a therapeutic agent in a target region associated with a disorder; the genetically altered chondrocyte not used for tissue repair or construction,

wherein the target region is an ectopic site, and wherein the composition is capable of delivering the therapeutic agent at a level sufficient to ameliorate the disorder, and wherein the therapeutic agent is selected from the group consisting of Erythropoietin protein and Erythropoietin mimetibody.

- 61. (New) The composition of claim 60, wherein the composition is not part of the ectopic target region.
- 62. (New) The composition of claim 60, wherein the ectopic site is in a site in an organ selected from the group consisting of the brain, heart, liver, kidney, gastro-intestinal tract, spleen, smooth muscles, skeletal muscles, eye, ganglions, lungs, gonads, and pancreas.
- 63. (New) The composition of claim 60, wherein the ectopic site is an aqueous environment selected from the group consisting of blood and plasma.
- 64. (New) The composition of claim 60, wherein the biocompatible substrate is gel matrix substrate.
- 65. (New) The composition of claim 64, wherein the gel matrix substrate is selected from the group consisting of alginate, polysaccharide, and agarose.
- 66. (New) The composition of claim 64, wherein the dimensions of the implanted gel matrix substrate determines the concentration of chondrocytes within the gel matrix substrate that are available to express the therapeutic agent.
- 67. (New) The composition of claim 64, wherein the concentration of chondrocytes in the gel matrix substrate is about 100,00 to 10 million cells per ml in a gel matrix volume of 0.05 ml to 10 ml.
- 68. (New) The composition of claim 48, wherein the genetically altered chondrocyte is isolated from cartilage tissue.
- 69. (New) The composition of claim 60, wherein the genetically altered chondrocyte is isolated from cartilage tissue.